FIG. 1

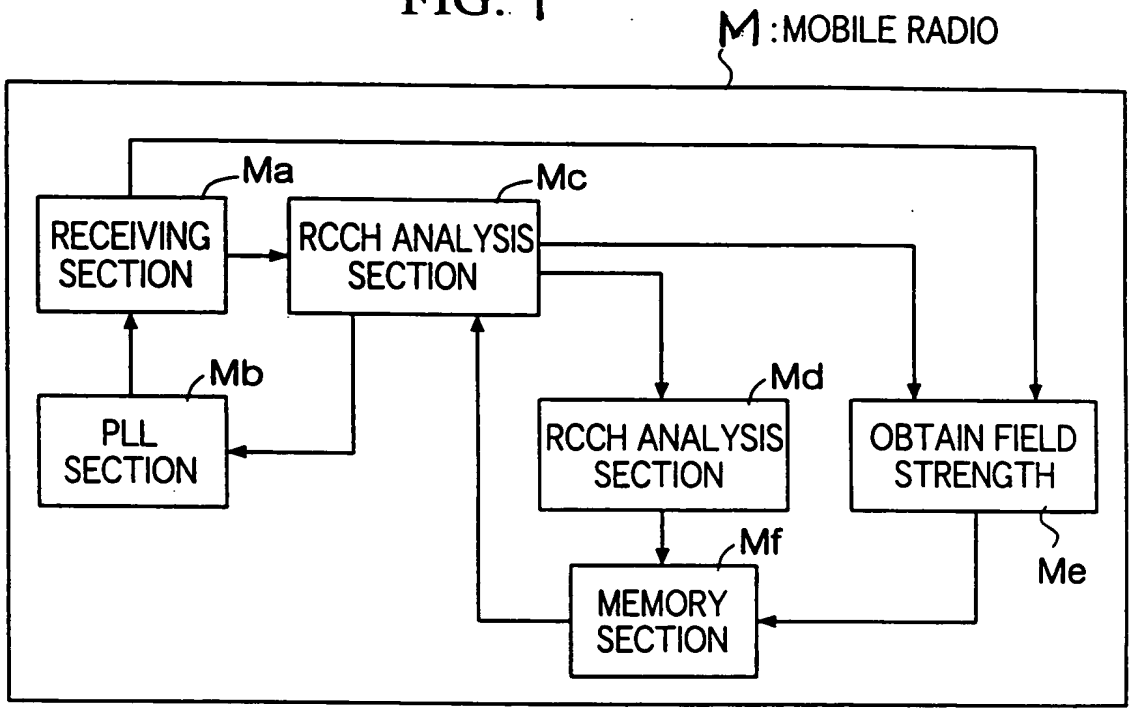

M :MOBILE RADIO
Ma
RECEIVING SECTION
Mc
RCCH ANALYSIS SECTION
Mb
PLL SECTION
Md
RCCH ANALYSIS SECTION
OBTAIN FIELD STRENGTH
Me
Mf
MEMORY SECTION

FIG. 2

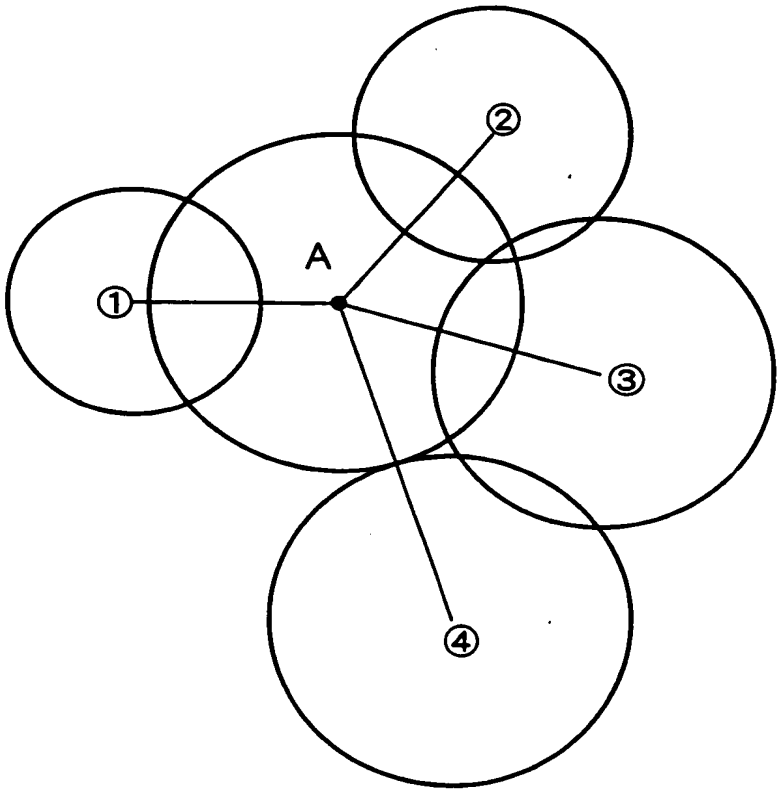


FIG.3

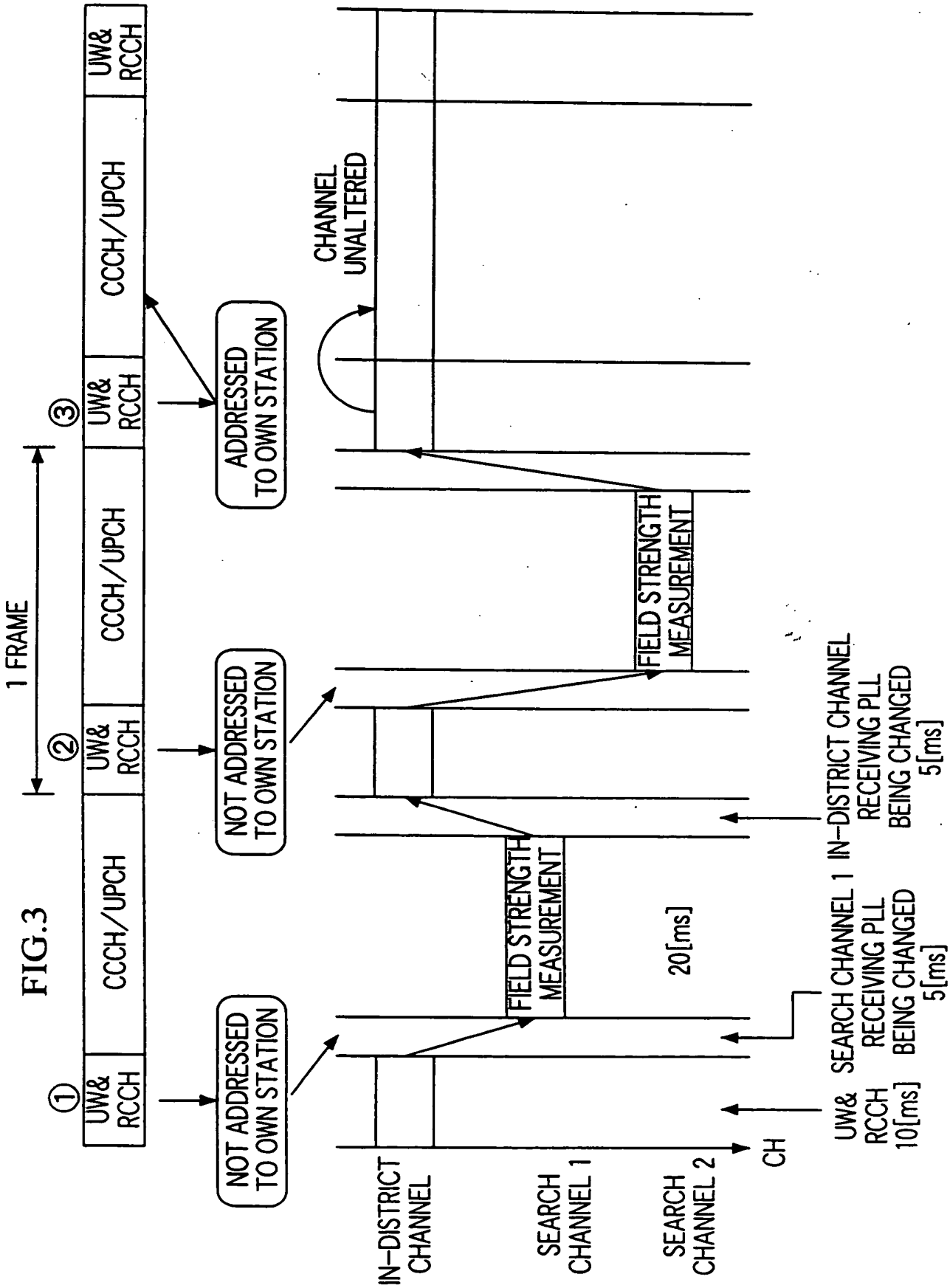
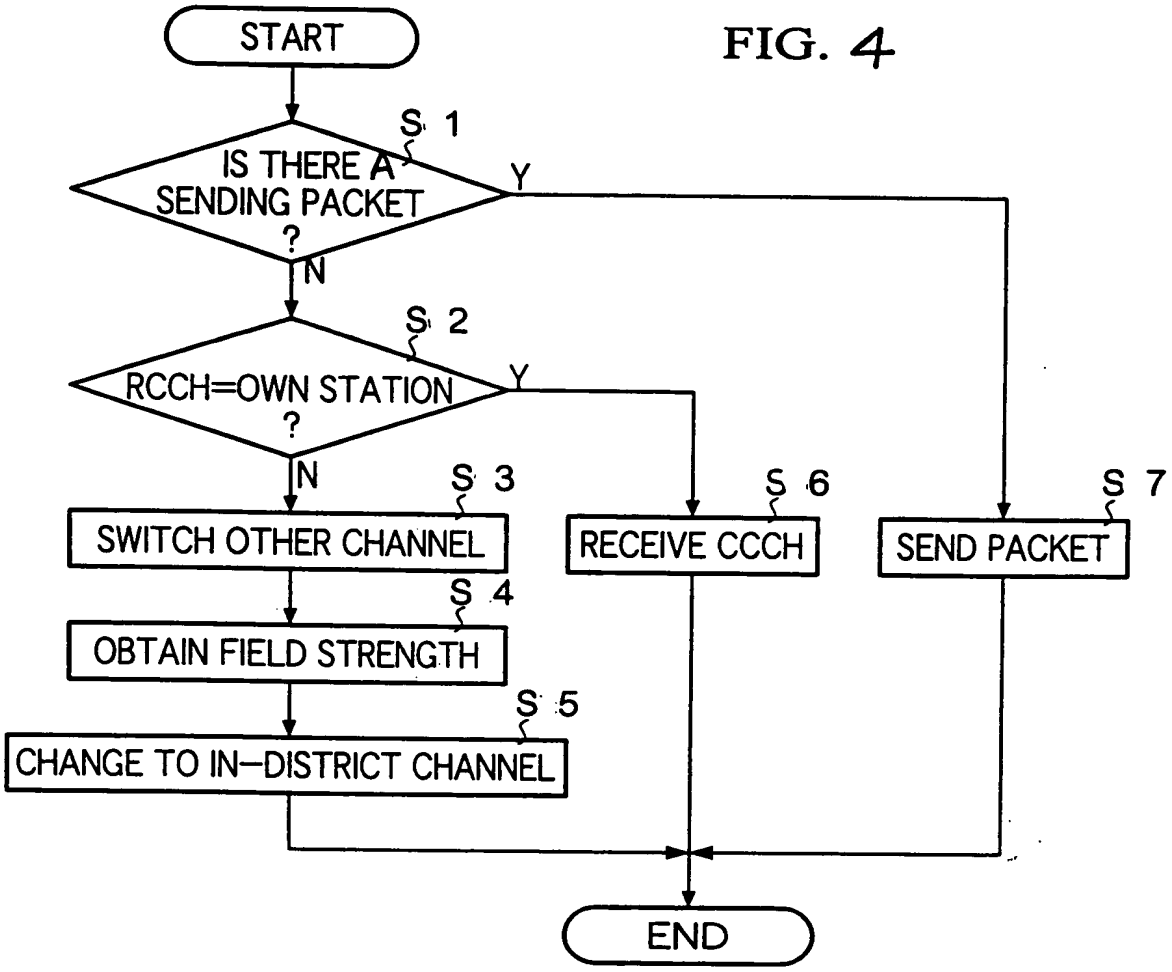

1 FRAME
①
②
③
UW& RCCH
CCCH/UPCH
UW& RCCH
CCCH/UPCH
UW& RCCH
CCCH/UPCH
NOT ADDRESSED TO OWN STATION
NOT ADDRESSED TO OWN STATION
ADDRESSED TO OWN STATION
CHANNEL UNALTERED
FIELD STRENGTH MEASUREMENT
FIELD STRENGTH MEASUREMENT
20[ms]
IN-DISTRICT CHANNEL RECEIVING PLL BEING CHANGED 5[ms]
SEARCH CHANNEL 1 RECEIVING PLL BEING CHANGED 5[ms]
UW& RCCH 10[ms]
IN-DISTRICT CHANNEL
SEARCH CHANNEL 1
SEARCH CHANNEL 2
CH

FIG. 4


START
S 1
IS THERE A SENDING PACKET ?
Y
N
S 2
RCCH=OWN STATION ?
Y
N
S 3
SWITCH OTHER CHANNEL
S 4
OBTAIN FIELD STRENGTH
S 5
CHANGE TO IN-DISTRICT CHANNEL
S 6
RECEIVE CCCH
S 7
SEND PACKET
END

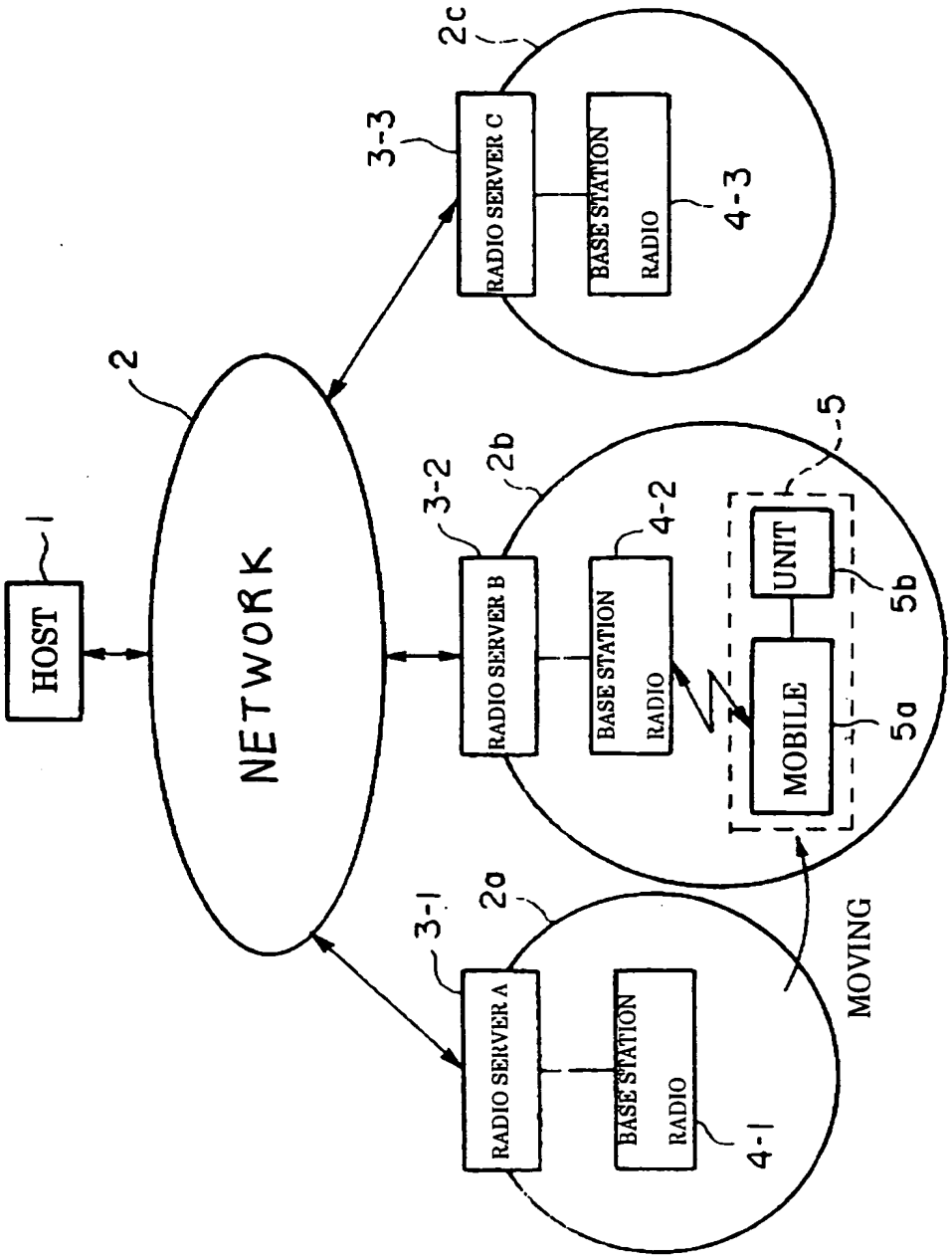

HOST
1
NETWORK
2
RADIO SERVER A
3-1
BASE STATION RADIO
4-1
2a
RADIO SERVER B
3-2
BASE STATION RADIO
4-2
2b
UNIT
5b
MOBILE
5a
5
MOVING
RADIO SERVER C
3-3
BASE STATION RADIO
4-3
2c

FIG. 5

FIG.6

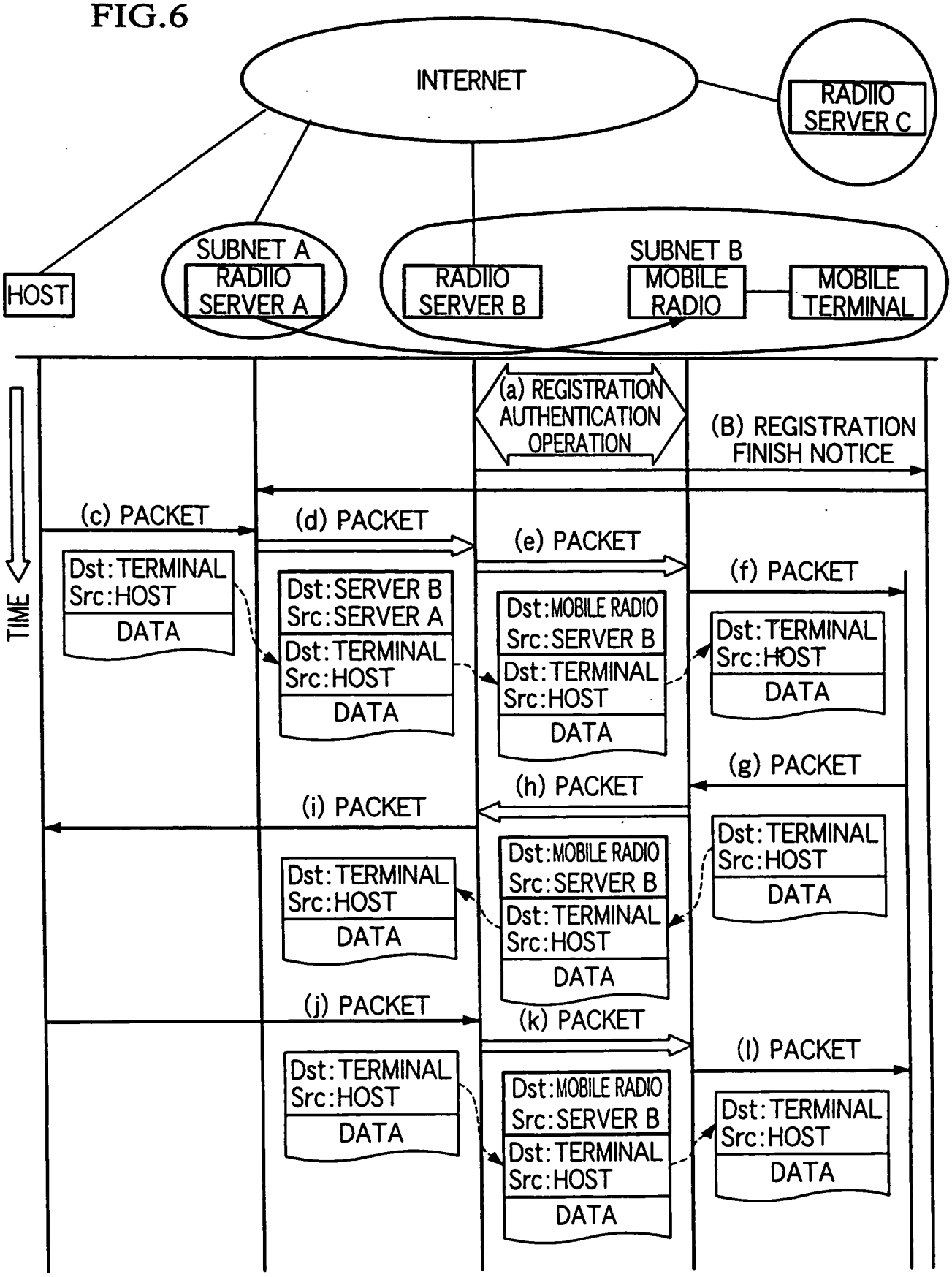

INTERNET
RADIIO SERVER C
SUBNET A
RADIIO SERVER A
HOST
RADIIO SERVER B
SUBNET B
MOBILE RADIO
MOBILE TERMINAL
TIME
(a) REGISTRATION AUTHENTICATION OPERATION
(B) REGISTRATION FINISH NOTICE
(c) PACKET
(d) PACKET
(e) PACKET
(f) PACKET
(g) PACKET
(h) PACKET
(i) PACKET
(j) PACKET
(k) PACKET
(l) PACKET
Dst:TERMINAL Src:HOST DATA
Dst:SERVER B Src:SERVER A
Dst:TERMINAL Src:HOST DATA
Dst:MOBILE RADIO Src:SERVER B
Dst:TERMINAL Src:HOST DATA
Dst:TERMINAL Src:HOST DATA
Dst:TERMINAL Src:HOST DATA
Dst:MOBILE RADIO Src:SERVER B
Dst:TERMINAL Src:HOST DATA
Dst:TERMINAL Src:HOST DATA
Dst:MOBILE RADIO Src:SERVER B
Dst:TERMINAL Src:HOST DATA
Dst:TERMINAL Src:HOST DATA

FIG.7

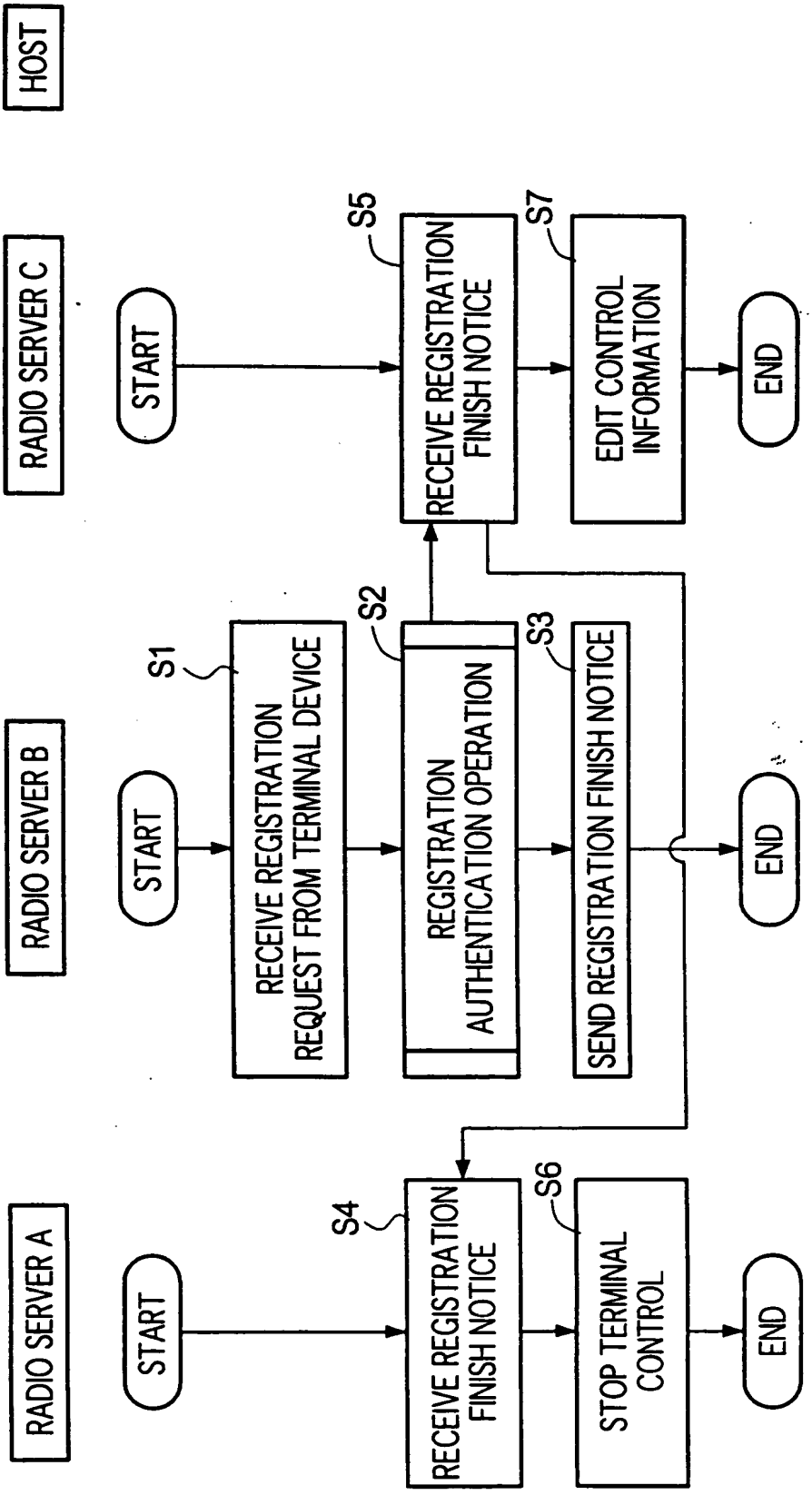

HOST
RADIO SERVER C
RADIO SERVER B
RADIO SERVER A
START
START
START
S1
RECEIVE REGISTRATION REQUEST FROM TERMINAL DEVICE
S2
REGISTRATION AUTHENTICATION OPERATION
S3
SEND REGISTRATION FINISH NOTICE
S4
RECEIVE REGISTRATION FINISH NOTICE
S5
RECEIVE REGISTRATION FINISH NOTICE
S6
STOP TERMINAL CONTROL
S7
EDIT CONTROL INFORMATION
END
END
END

FIG.8

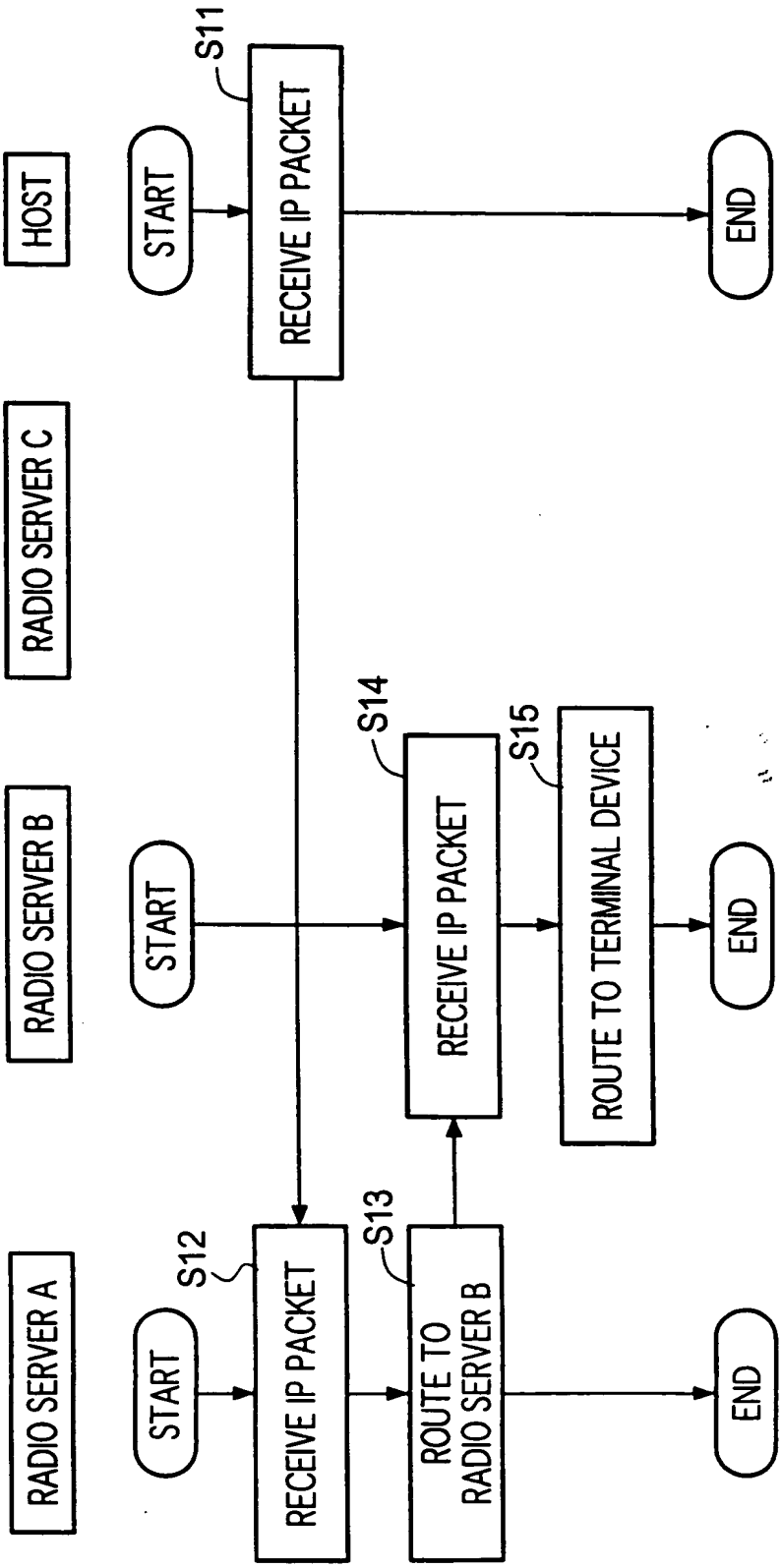

HOST
RADIO SERVER C
RADIO SERVER B
RADIO SERVER A
START
RECEIVE IP PACKET
S11
END
START
RECEIVE IP PACKET
S14
ROUTE TO TERMINAL DEVICE
S15
END
START
RECEIVE IP PACKET
S12
ROUTE TO RADIO SERVER B
S13
END

FIG. 9

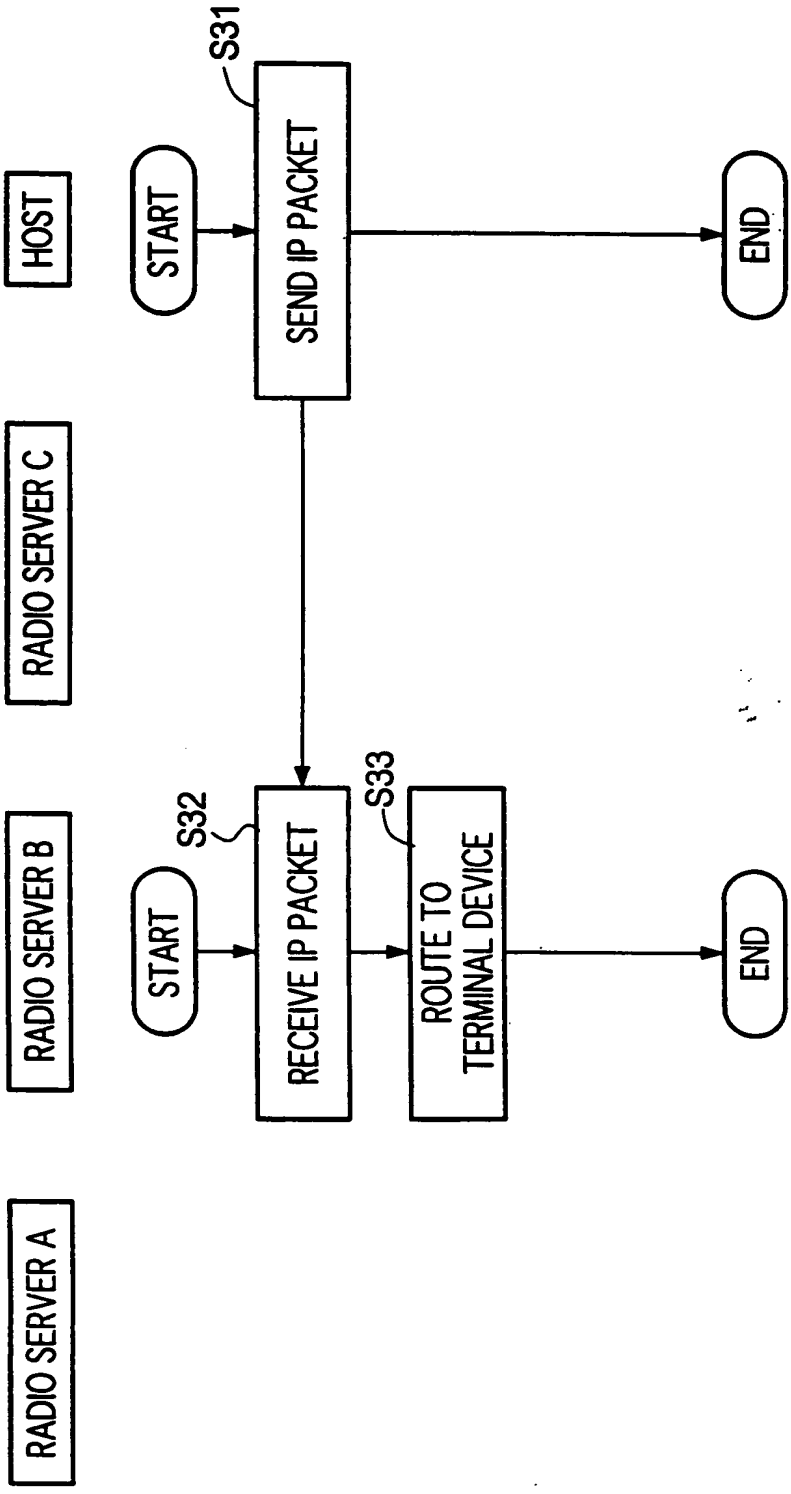

HOST
RADIO SERVER C
RADIO SERVER B
RADIO SERVER A
START
S31
SEND IP PACKET
END
START
S32
RECEIVE IP PACKET
S33
ROUTE TO TERMINAL DEVICE
END

FIG. 10

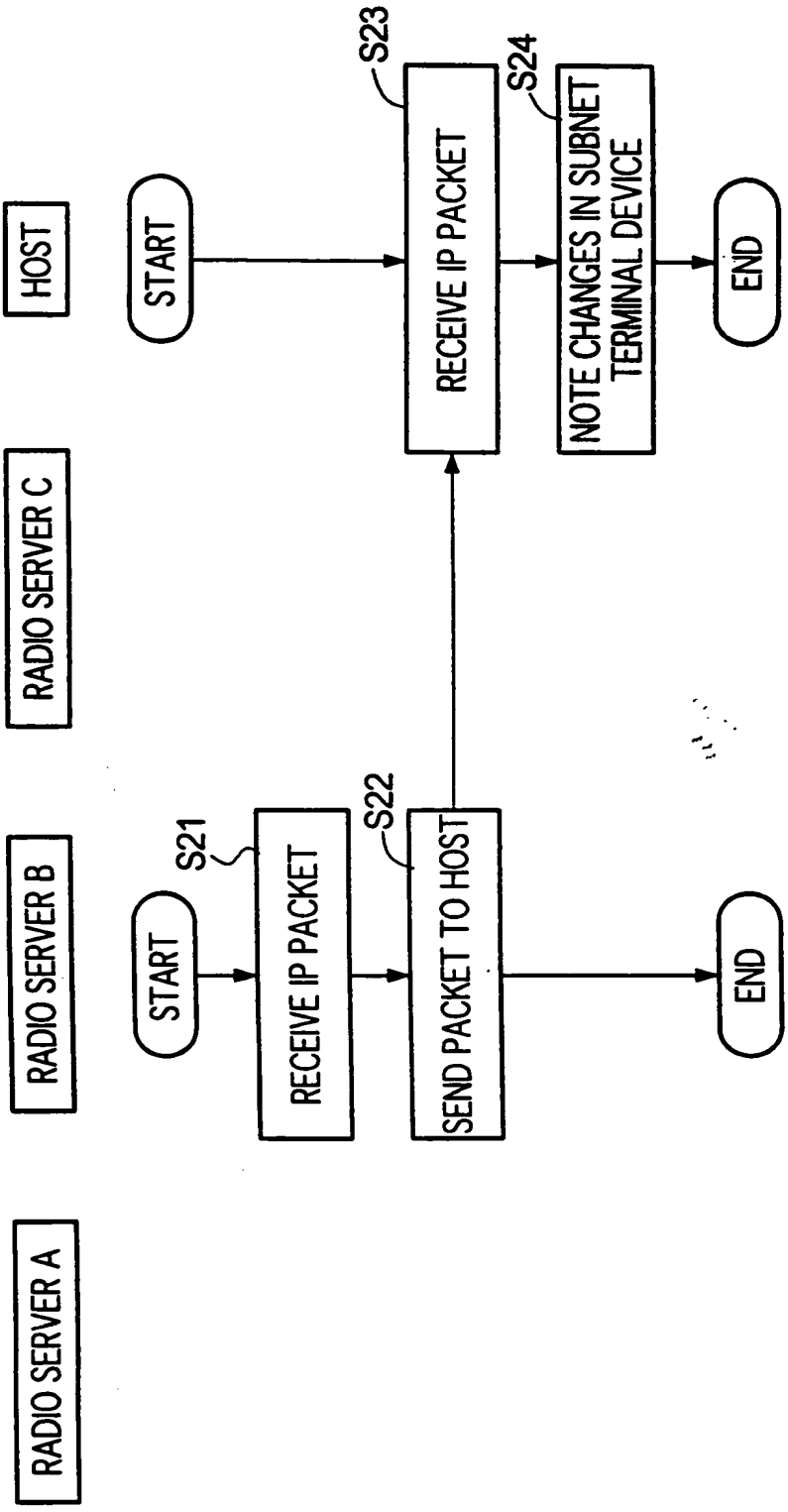
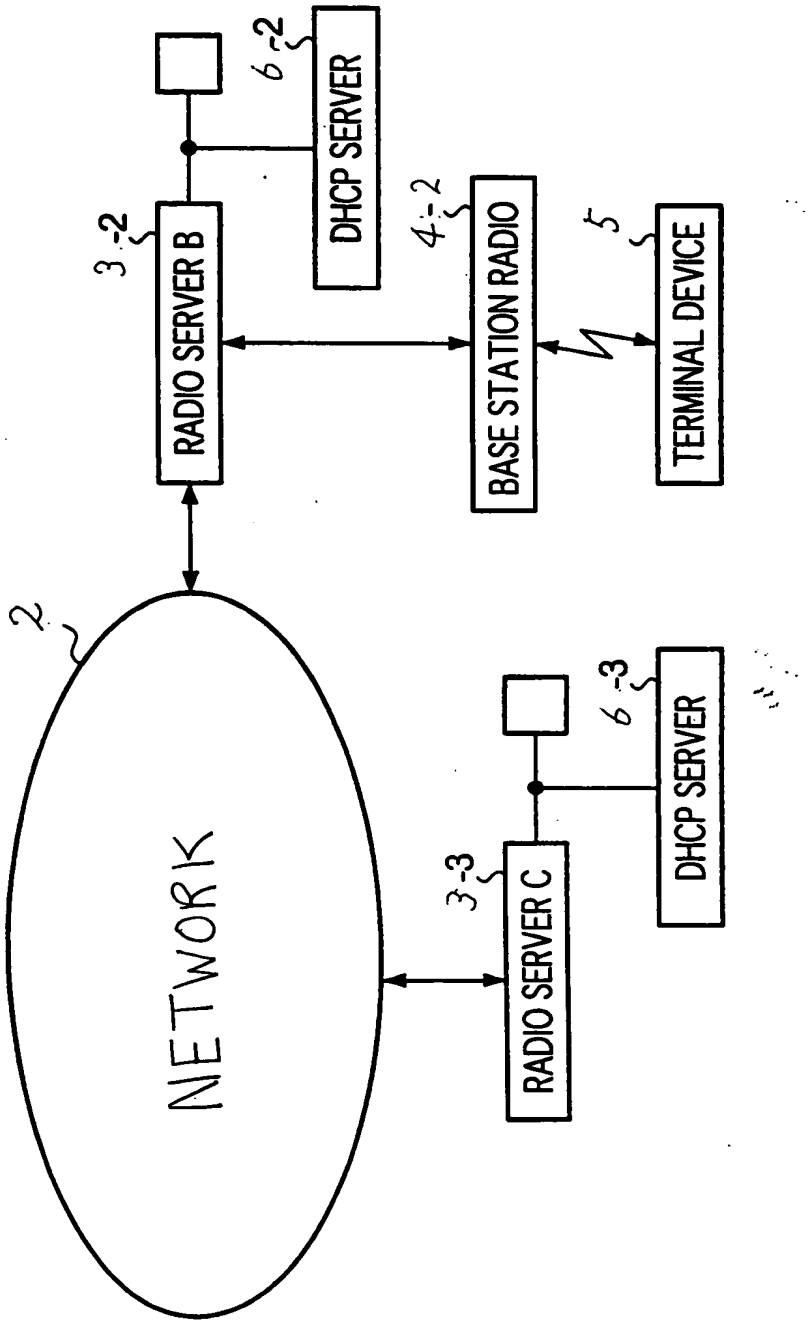

RADIO SERVER A
RADIO SERVER B
RADIO SERVER C
HOST
START
S21
RECEIVE IP PACKET
S22
SEND PACKET TO HOST
END
START
S23
RECEIVE IP PACKET
S24
NOTE CHANGES IN SUBNET TERMINAL DEVICE
END

FIG.11


NETWORK
2
RADIO SERVER B
3-2
DHCP SERVER
6-2
BASE STATION RADIO
4-2
TERMINAL DEVICE
5
RADIO SERVER C
3-3
DHCP SERVER
6-3

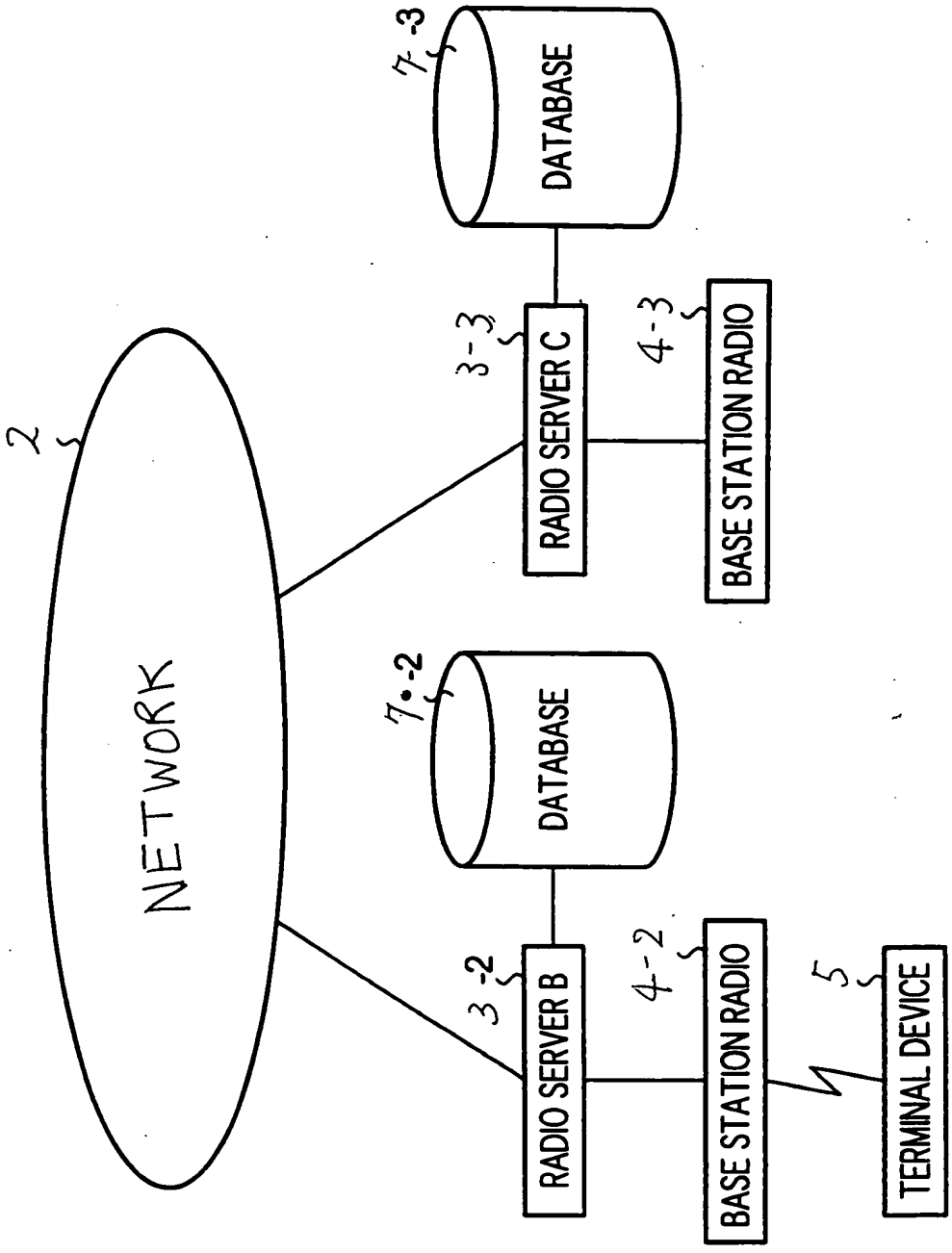
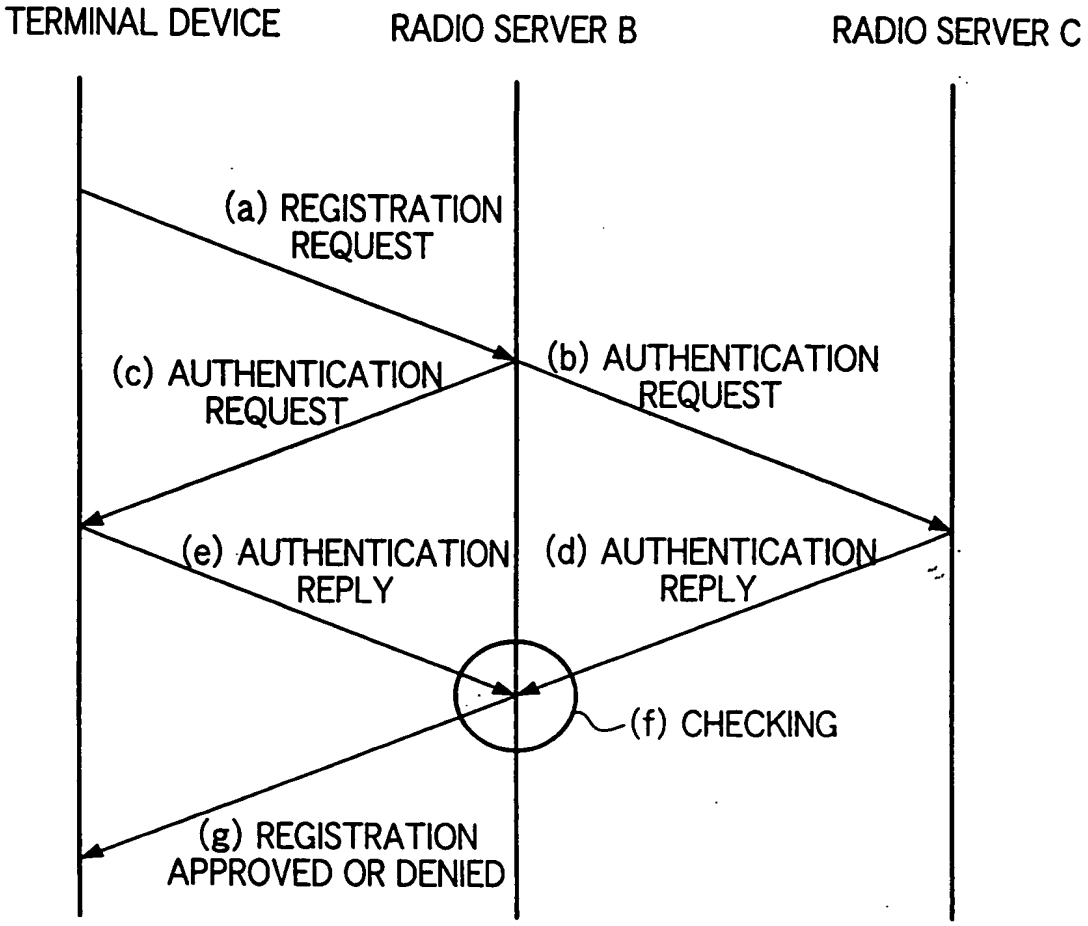

NETWORK
2
DATABASE
7-3
RADIO SERVER C
3-3
BASE STATION RADIO
4-3
DATABASE
7-2
RADIO SERVER B
3-2
BASE STATION RADIO
4-2
TERMINAL DEVICE
5

FIG. 12

FIG.13


TERMINAL DEVICE
RADIO SERVER B
RADIO SERVER C
(a) REGISTRATION REQUEST
(b) AUTHENTICATION REQUEST
(c) AUTHENTICATION REQUEST
(d) AUTHENTICATION REPLY
(e) AUTHENTICATION REPLY
(f) CHECKING
(g) REGISTRATION APPROVED OR DENIED